

ORIGINAL/COPY NO. 1

ENVIRONMENTAL SITE ASSESSMENT REPORT
Vacant Property
SW1/4, Section 27, Township 14 North, Range 20 West
Missoula County, Montana

December 2, 2008

PREPARED FOR:

DeSmet School District #20
6355 Padre Lane
Missoula, Montana 59808

US Department of Education
Office of Management
400 Maryland Avenue S.W.
Washington, DC 20202-4500

PREPARED BY:

Higgins Consulting Engineers, LLC
1151 West Broadway
PO Box 7158
Missoula, MT 59807-7158
(406) 728-4600
Fax (406) 728-4698

Project No. 10104

TABLE OF CONTENTS

<u>Section Number and Title</u>	<u>Page #</u>
EXECUTIVE SUMMARY.....	i
1.0 INTRODUCTION.....	1
1.1 Purpose.....	1
1.2 Limitations and Exceptions of Assessment.....	1
1.3 Limiting Conditions and Methodology Used.....	2
1.4 Definitions.....	3
2.0 SITE DESCRIPTION.....	4
2.1 Location and Legal Description.....	4
2.2 Site and Vicinity Characteristics.....	4
2.3 Descriptions of Structures, Roads, and Other Improvements to the Site.....	4
2.4 Information Reported by User.....	4
2.5 Current Uses of the Property.....	4
2.6 Past Uses of the Property.....	4
2.7 Current Uses of Adjoining Properties.....	5
2.8 Analysis of Impact on Recognized Environmental Conditions.....	5
3.0 ENVIRONMENTAL RECORDS REVIEW.....	6
3.1 Discussion of Search Results.....	6
3.2 Local Records.....	9
3.3 Analysis of Impact on Recognized Environmental Conditions.....	9
4.0 PHYSICAL SETTING SOURCES.....	10
4.1 Review of Topographic Maps.....	10
4.2 Site Geology.....	10
4.3 Regional Groundwater Quality and Occurrence.....	10
4.4 Aerial Photo Review.....	11
4.5 Historical Maps.....	11
4.6 Ownership/Occupancy Information.....	12
4.7 Permit Review.....	12
4.8 Zoning.....	12
4.9 Contact with Current On-Site Owner/Tenant.....	12
4.10 Other Interviews.....	12
4.11 Analysis of Impact on Recognized Environmental Conditions.....	12
5.0 INFORMATION DERIVED FROM SITE RECONNAISSANCE AND INTERVIEWS.....	13
5.1 Hazardous Substances in Connection with Identified Uses.....	13
5.2 Unidentified Substance Containers.....	13
5.3 Storage Tanks.....	13
5.4 Indications of Polychlorinated Biphenyls (PCBs).....	13
5.5 Indications of Asbestos Containing Materials (ACMs).....	13
5.6 Indications of Solid Waste Disposal.....	13
5.7 Physical Setting Analysis.....	13
5.8 Other Conditions of Concern.....	14
5.9 Analysis of Impact on Recognized Environmental Conditions.....	14
6.0 FINDINGS AND CONCLUSIONS.....	15
7.0 REFERENCES.....	16

List of Figures

Figure 1 – Vicinity Map

Figure 2 – Property Boundary Map

Figure 3 – Site and Adjacent Property Map

List of Appendices

Appendix A – Site Reconnaissance Photographs

Appendix B – User Questionnaire

Appendix C – ESA Scope of Service

EXECUTIVE SUMMARY

This report presents the results of a Phase I Environmental Site Assessment (ESA) of vacant property located in Southwest ¼ of Section 27, Township 14 North, Range 20 West in Missoula County, Montana (Site). Higgins Consulting Engineers conducted the ESA in November 2008 for DeSmet School District #20 and the US Department of Education. Higgins Consulting Engineers endeavored to perform this Phase I ESA in substantial conformance with the scope and limitations of ASTM Standard E 1527-05.

The Site is currently vacant and undeveloped. There are no improvements to the Site; however, two small metal structures are present. The structures are abandoned, and according to information provided by a DeSmet School District representative, these structures were once a part of a fireweather monitoring station operated by the National Oceanic and Atmospheric Administration. Higgins Consulting Engineers did not observe indicators of hazardous substances or petroleum products on the property (as defined herein) during the Site reconnaissance.

Indicators of hazardous substances and/or petroleum products were not observed on any adjacent properties. A non-hazardous material recycling operation is active on the adjacent property to the east. However, no indications of a past release, a present release, or imminent threat of a release of hazardous substances or petroleum products from this adjacent property into the ground, groundwater, surface water, or structures at the Site were observed.

A review of historical aerial photographs indicates that the Site has been virtually vacant and undeveloped since 1937.

A review of ownership records did not reveal any entities who would be considered to be those who used, stored, disposed or otherwise handled hazardous substances and/or petroleum products at the Site.

A review of occupancy records revealed that the Site has not had a common address as far back as 1940; therefore, no historical occupants of the Site were identified.

The following information was obtained during the review of environmental databases and records: (1) the Site was not listed in any Federal ASTM Standard database; (2) None of the adjacent properties were listed in any Federal ASTM Standard database; and (4), Five sites, within the ASTM Standard minimum search distance from the subject Site, were listed in the State's equivalent-superfund or in the Leaking Underground Storage Tank databases. Additional information about the nature of the releases at the above-listed release sites was obtained from State records and other supporting documents in order to determine whether, or not, these release sites have impacted the Site, or might pose a significant environmental threat to the Site. The information obtained from a review of the State records and other supporting documents reviewed for this ESA suggests that none of the listed sites appear to have caused environmental contamination at the subject Site.

This ESA produced no evidence suggesting that recognized environmental conditions affect the Site.

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) is to identify, to the extent feasible pursuant to the processes identified in the Standard Practice, recognized environmental conditions in connection with real property. The Phase I ESA of the Vacant Property, located in the Southwest ¼ of Section 27, Township 14 North and Range 20 West in Missoula County, Montana, (Site) consists of information about the property obtained from a records review, site reconnaissance, and interviews with knowledgeable site representatives and with one or more government officials. This Phase I ESA was performed, and this report was prepared for DeSmet School District #20 and the US Department of Education (Client).

1.2 Limitations and Exceptions of Assessment

The scope of the Phase I ESA is consistent with those outlined in the American Society for Testing and Materials' *Standard Practice for Environmental Site Assessment: Phase I Environmental Assessment Process (Designation E 1527-00)*. It is beyond the scope of services for this Phase I ESA to identify concerns associated with the offsite management of solid or hazardous substances¹ and wastes originating from the subject property, unless these instances were discovered incidentally during the performance of this scope of work.

There are no beneficiaries of this report other than the Client, and no third party is entitled to rely upon this report without the written authorization of the Client and Higgins Consulting Engineers, and a written agreement limiting Higgins Consulting Engineers' liability.

The services provided by Higgins Consulting Engineers for this Phase I ESA were rendered in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing under similar conditions. Such services were also performed in conformance with the instructions of the Client as set forth in the scope of work attached to the contract between the Client and Higgins Consulting Engineers.

The Phase I ESA is a technical report that may contain statements that reflect or rely on Higgins Consulting Engineers' interpretations of environmental laws, rules, regulations, or policies of federal, state, or local government. These interpretations do not constitute a legal opinion.

Other than as set forth above in the Summary (regarding conformance with the scope and limitations of the referenced document of the American Society for Testing and Materials), and as contained in the foregoing paragraph regarding the standard of care employed and conformance with the scope of work and other contract documents, no representation or warranty, express or implied, is made.

In preparing this report, Higgins Consulting Engineers relied on information provided by several sources, including, but not limited to interviews with site representatives and state agencies. Where such reliance is made, the source has been identified in the text. All such sources are identified in Section 7 of this report (References). It is beyond the scope of this project to verify the information provided by these

¹ As used in this report, the term *hazardous substances* include both hazardous materials.

sources. Therefore, Higgins Consulting Engineers does not guarantee the completeness or accuracy of the information provided by these sources or the report conclusions based on their information.

1.3 Limiting Conditions and Methodology Used

It is beyond the scope of services established for this Phase I ESA to:

(1) Collect or conduct laboratory analyses of environmental media, (2) assess the structural condition of above and below ground site structures, equipment, piping, or other facilities, (3) assess issues related to worker health and safety, (4) identify and delineate jurisdictional wetlands, (5) identify liabilities associated with offsite management of solid or hazardous substances or waste, (6) prepare cost estimates for the cleanup and identification of parties potentially responsible for the cleanup of hazardous substance releases, (7) assess issues pertaining to compliance with environmental regulations, except to the extent that such regulations pertain to the status of recognized or potential environmental conditions at the subject property, or (8) assess or identify issues related to wildlife, fish and aquatic life, plant species, or their associated habitats.

It is also beyond the scope of services for this Phase I ESA to collect samples or otherwise conduct field investigatory activities to verify the presence or absence of: (a) lead-based paint, (b) asbestos-containing material (ACM), (c) lead or other contaminants in site drinking water, or (d) naturally occurring radon.

No investigation is thorough enough to exclude the presence of hazardous substances at a given location. If hazardous substances or recognized environmental conditions were not identified during the Phase I ESA, such a finding should not be construed as a guarantee of the absence of such hazardous substances or recognized environmental conditions but, rather, the result of the services provided, including Higgins Consulting Engineers' professional judgment, within the scope, limitations, and cost of the work performed.

Any opinions or recommendations presented herein apply to the site conditions existing at the time the services were performed. Higgins Consulting Engineers is unable to report on or accurately predict events that may change site conditions after the described services are performed, whether those events occur naturally or are caused by external forces. Higgins Consulting Engineers assumes no responsibility for conditions the firm is not authorized to investigate or conditions not generally recognized as environmentally unacceptable when the services are performed. Higgins Consulting Engineers has not performed any surface or subsurface sampling in connection with the Phase I ESA; therefore, this report does not reach final conclusions regarding the absence, or presence, of surface or subsurface contamination.

1.4 Definitions

1. Adjoining Properties: any real property or properties, the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous with that of the property but for a street, road, or other public thoroughfare separating them.
2. Client: DeSmet School District #20, 6355 Padre Lane, Missoula, Montana 59808; US Department of Education, 400 Maryland Ave. S.W., Washington, DC 20202-4500
3. Consultant: Higgins Consulting Engineers, LLC.
4. Contract: The agreement by which the Client engages the Consultant to conduct an environmental site assessment of the Property subject to the terms and conditions specified.
5. Hazardous Substance: any substance designated pursuant to Section 1321(b)(2)(A) of Title 33, any element, compound, mixture, solution, or substance designated pursuant to Section 9602 of this title, any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress), any toxic pollutant listed under Section 1317(a) of Title 33, any hazardous air pollutant listed under Section 112 of the Clean Air Act (42 USC § 7412), and any imminently hazardous chemical substance or mixture with respect to which the administrator (of EPA) has taken action pursuant to Section 2606 of Title 15.
6. Petroleum Products: those substances included within the meaning of the terms within the petroleum exclusion to CERCLA (42 USC § 9601(14)) as interpreted by the courts and EPA. That is: petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel. The distillates of crude oil include gasoline, kerosene, diesel, jet fuel, and fuel oil, pursuant to Standard Definition of Petroleum Statistics (API, 4th Edition, 1988).
7. Property (site): A tract of land located in the SW1/4, Section 27, T14N, R20W, Missoula County, Montana.
8. Recognized environmental condition: The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances and petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.
9. Vicinity: An approximate ¼-mile radius surrounding the site.

2.0 SITE DESCRIPTION

A Higgins Consulting Engineer's Inspector performed a Site reconnaissance on November 24, 2008.

2.1 Location and Legal Description

A partial legal description of the Site is as follows:

A Tract of Land Located in the SW1/4, Section 27, Township 14 North, Range 20 West, Principal Meridian, Missoula County, Montana

The Site is located approximately 4 miles west of the Missoula city limits on Highway 10 West. There is no common address of the Site. The approximate location of the Site is shown in Figure 1. Figure 2 is the property boundary map provided by the Missoula County Surveyor's Office.

2.2 Site and Vicinity Characteristics

The Site is located in a mainly rural area west of Missoula, Montana. However, there are a few commercial and light industrial enterprises in the immediate vicinity. The subject Site is bordered by vacant land, a recycling business and a portion of the Montana Rail Link railroad.

The Site can be accessed by turning north from Highway 10 West. Figure 3 shows the Site and adjacent properties. Photographs of the Site are given in Appendix A.

2.3 Descriptions of Structures, Roads, and Other Improvements to the Site

There are no roads or other improvements to the Site. Two vacant and abandoned structures were present.

2.4 Information Reported by User

The Higgins Consulting Engineer's Inspector obtained the legal description from a representative of DeSmet School District #20. The DeSmet representative also completed the User Questionnaire, a copy of which is provided in Appendix B. The responses provided by the DeSmet representative suggest that recognized environmental conditions do not affect the Site.

2.5 Current Uses of the Property

The property is currently vacant and undeveloped.

2.6 Past Uses of the Property

Information obtained from interviews and historic records reviewed, suggests that the property has always been vacant and undeveloped in the past.

2.7 Current Uses of Adjoining Properties

A list and description of Adjoining Properties are given below. In addition, a summary of the visual observations made by Higgins Consulting's Inspector is also given.

- **North** – Vacant Property and MRL railroad tracks. Hazardous substances or petroleum products were not observed on these properties under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the Site or into the ground, groundwater, or surface water of the Site. Hazardous substances are routinely transported on the MRL railroad; however, during the site reconnaissance, no evidence was obtained that suggests the subject Site is threatened by an imminent release of hazardous substances being transported on these railroad tracks.
- **South** – Vacant Property. Hazardous substances or petroleum products were not observed on these properties under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the Site or into the ground, groundwater, or surface water of the Site.
- **East** – Unknown Address; Recycling Operation. Hazardous substances or petroleum products were not observed on these properties under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the Site or into the ground, groundwater, or surface water of the Site. The recycling operation appeared to be limited to wood, wood-related products and other non-hazardous materials.
- **West** – Vacant Property and Highway 10 West. Hazardous substances or petroleum products were not observed on this property under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the Site or into the ground, groundwater, or surface water of the Site. Hazardous substances are routinely transported on Highway 10; however, during the site reconnaissance, no evidence was obtained that suggests the subject Site is threatened by an imminent release of hazardous substances being transported on these railroad tracks.

2.8 Analysis of Impact on Recognized Environmental Conditions

This portion of the ESA produced no evidence suggesting that recognized environmental conditions affect the Site.

3.0 ENVIRONMENTAL RECORDS REVIEW

The purpose of the records review is to obtain and review records to help identify recognized environmental conditions. Higgins Consulting Engineers reviewed standard federal and state databases available on the subject property and sites within the standard, minimum search distance outlined in ASTM E 1527 (see Section 1.2). The center point used for the search was the Site location. The standard environmental record sources reviewed are outlined below along with a reference to the minimum search distance (MSD) from the Site. The databases queried for this part of the ESA are listed in Appendix C.

3.1 Discussion of Search Results

3.1.1 NPL - National Priorities List (MSD = 1.0 Mile)

No sites were listed within the MSD from the subject site.

3.1.2 Proposed NPL (MSD = 1.0 Mile)

No sites were listed within the MSD from the subject site.

3.1.3 CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) (MSD = 0.5 Mile)

No sites were listed within the MSD from the subject site.

3.1.4 CERC-NFRAP (CERCLIS No Further Remedial Action Plan) (MSD = 0.5 Mile)

No sites were listed within the MSD from the subject site.

3.1.5 CORRACTS (Corrective Action Report) (MSD = 1.0 Mile)

No sites were listed within the MSD from the subject site.

3.1.6 RCRA-TSD List (List of Facilities who Treat, Store or Dispose Hazardous Waste) (MSD = 0.5 Mile)

No sites were listed within the MSD from the subject site.

3.1.7 RCRA-LQG List (List of Facilities who are registered as Large Quantity Generators (>2200 lb./mo.) of Hazardous Waste) (MSD = 0.25 Mile)

No sites were listed within the MSD from the subject site.

3.1.8 RCRA-SQG List (List of Facilities who are registered as Small Quantity Generators (>220 lb./mo. but < 2200 lb./mo.) of Hazardous Waste) (MSD = 0.25 Mile)

No sites were listed within the MSD from the subject site.

3.1.9 ERNS (Emergency Response Notification System) (MSD = Target Property)

No sites were listed within the MSD from the subject site.

3.1.10 CECRA (Comprehensive Environmental Cleanup and Reclamation Act) (MSD = 1.0 Mile)

One site was listed within the MSD of the subject Site. The listed site is known as Real Log Homes, located at 9575 Futurity Drive, Missoula, Montana. A review of the information contained in the public domain revealed that the MDEQ ranked the Real Log Homes site as a MEDIUM priority for investigation and cleanup. The public record indicated that hazardous substances were removed from the Real Log Home site in the early 1990's, and a remedial investigation is pending. Real Log Homes is down gradient from the DeSmet School Site; therefore, even if groundwater has been impacted at Real Log Homes, the DeSmet School property would not be impacted (MCCHD 1989) (MDEQ 2008).

3.1.11 DEL CECRA (Delisted CECRA Sites) (MSD = 1.0 Mile)

No sites were listed within the MSD from the subject site.

3.1.12 SWF/LF (Solid Waste Management Facilities List) (MSD = 0.5 Mile)

No sites were listed within the MSD from the subject site.

3.1.13 SPILLS (Hazardous Materials Spills Report) (MSD = Target Property)

No sites were listed within the MSD from the subject site.

3.1.14 VCP (Voluntary Cleanup & Redevelopment Act Registry) (MSD = 0.5 Mile)

No sites were listed within the MSD from the subject site.

3.1.15 Brownfields (Brownfields Site Listing) (MSD = 0.5 Mile)

No sites were listed within the MSD from the subject site.

3.1.16 CDL (Clandestine Drug Labs) (MSD = Target Property)

No sites were listed within the MSD of the subject property.

3.1.17 LUST (List of Leaking Underground Storage Tank Sites) (MSD = 0.5 Mile)

The subject Site was not listed in the database. Nor were any adjacent properties listed.

Five (5) properties were listed within the MSD of the Site, and are discussed in more detail in the paragraphs below.

CROSSROADS TRUCK CENTER (8018 Highway 93 North)

The Crossroads Truck Center (Crossroads) is located approximately 1 mile north northwest of the Site on Highway 10 West. Two releases have been reported for Crossroads. One release has been issued a "No Further Corrective Action" letter by the MDEQ. The other release has been investigated, and the current data suggests that groundwater has not been impacted. Therefore, the open release at Crossroads does not appear to pose a significant threat to the subject Site.

MURALT'S TRUCK PLAZA (8800 Truck Stop Road)

Muralt's Truck Plaza (Muralt's) is located approximately 1 mile north northwest of the Site. Five releases have been reported for Muralt's, three of which have been issued "No Further Corrective Action" letters by the MDEQ. The two remaining active releases have been investigated and the current data suggests that groundwater has not been impacted. Therefore, the open releases at Muralt's do not appear to pose a significant threat to the subject Site.

ELEANOR WILLIAMS (9850 Derby Drive)

The Eleanor Williams release site is located approximately ¾-mile northwest of the Site. This release has been issued a "No Further Corrective Action" letter by the MDEQ, suggesting that the release does not pose a significant threat to the subject Site.

RH GROVER INC. (9550 Derby Drive)

The RH Grover release site is located approximately ¾-mile northwest of the Site. This release has been issued a "No Further Corrective Action" letter by the MDEQ, suggesting that the release does not pose a significant threat to the subject Site.

REAL LOG HOMES. (9575 Futurity Drive)

The Real Log Homes release site is located approximately ¾-mile northwest of the Site. This release has been issued a "No Further Corrective Action" letter by the MDEQ, suggesting that the release does not pose a significant threat to the subject Site.

3.1.18 UST (List of Registered Underground Storage Tank Facilities) (MSD = 0.25 Mile)

The Site is not listed in this database. No adjacent properties were listed in this database. No properties within the MSD of the Site were listed.

3.1.19 Indian UST (MSD = 1.0 Mile)

No sites were listed within the MSD from the subject Site.

3.2 Local Records

3.2.1 Hazardous Material Incidents Reports (MSD = Target Property)

There were no listings for the Site in the records of the Missoula City-County Health Department.

3.2.2 Facility Inspection Reports (MSD = Target Property)

The Missoula Valley Water Quality District (MVWQD) did not have a facility inspection file for the Site.

3.3 Analysis of Impact on Recognized Environmental Conditions

This portion of the ESA produced no evidence suggesting that recognized environmental conditions affect the Site.

4.0 PHYSICAL SETTING SOURCES

4.1 Review of Topographic Maps

The 1964, photo revised 1978, U.S. Geologic Survey (USGS) topographic map for the Northwest Missoula, Montana quadrangle was reviewed to provide information about the topography of the Site and previous development of the Site and the Site's vicinity.

A review of the above-referenced map indicates that the site is situated at an approximate elevation of 3180 feet above Mean Sea Level (MSL). The subject topographic map showed no structures on the Site, or on adjacent properties. In addition, the map indicated that no structures indicative of the use, storage or handling of hazardous substances and/or petroleum products were within 1 mile of the Site.

The map did show the presence of the railroad tracks north of the Site, and Highway 10, west of the Site. As noted in Section 2, hazardous substances are routinely transported on these commercial routes. If spills or releases of hazardous substances occur on either route adjacent to the Site, the Site could be deleteriously impacted. However, this ESA produced no evidence suggesting there is an imminent threat of such releases.

It appears the general topographical slope is toward the Site from the southwest and northeast. Indeed, this is due to the fact that the Site sits in the Missoula Valley, which is more fully described and discussed in Section 4.2. The map does not show any significant structures northeast or southwest of the Site (i.e., at elevations higher than the subject Site), which might be considered to be facilities that might use, store, dispose or otherwise handle hazardous substances.

4.2 Site Geology

The Site sits in the Missoula Basin, which is a closed intermontane depression (Geldon, 1980). The Rattlesnake Hills to the north, the Sapphire Mountains to the east, the Bitterroot Range to the south and the Ninemile Divide to the west define the Basin boundary. Two main rivers drain the valley floor. They are the Clark Fork and Bitterroot Rivers.

The Missoula Basin is comprised of Tertiary and Quaternary sediments overlying Precambrian bedrock and can be up to 3,000 feet thick (McMurtrey and other, 1965). The Site appears to be in an area of Glaciolacustrine deposits, and characterized as semi-consolidated varved clay and silt underlying the high terraces in the Missoula Valley (Geldon, 1980).

4.3 Regional Groundwater Quality and Occurrence

The Site is situated within the boundary of the Missoula Valley Sole Source Aquifer (MCCHD 1980). This aquifer has generally been divided into three main stratigraphic units.

Unit One includes interbedded boulders, cobbles, and gravel with sand, silt and some clay (Woessner, 1988). Thickness ranges from 10 to 30 feet and is found at the land surface. Unit One typically is not saturated except beneath and adjacent to streams (Woessner, 1988).

Unit Two is a tan to yellow silty sandy clay with layers of coarse sand and gravel. The thickness of Unit Two averages 40 feet in the center of the basin and up to 130 feet. In addition, Unit Two may be absent in some portions of the valley (Woessner, 1988). The closest groundwater to be found at the Site would likely be in Unit Two.

Unit Three consists of interbedded gravel, sand, silt and clay and is coarser toward the bottom of the unit. The thickness of Unit Three varies from 50 feet to 100 feet. Development of wells in Unit Three can produce up to 3,000 gallons of water per minute (Woessner, 1988).

Groundwater flow direction in the vicinity of the Site has been reported to flow from the northeast to the southwest, toward the Clark Fork River. Groundwater depth in the Site's vicinity reportedly varies from approximately 80 feet to 100 feet. (MCCHD 1989).

4.4 Aerial Photo Review

Historical aerial photographs readily available from the Missoula County Surveyor's Office were reviewed to obtain information about the history of development on and in the vicinity of the Site. The available photographs at the Surveyor's Office were not of sufficient scale to conduct an effective review of the historical uses of the Site. The earliest photograph reviewed was taken in 1937. The latest photograph reviewed was taken from Google Earth, circa 2008. The date of each photograph reviewed and the observations noted during the review are summarized below:

TABLE 1: AERIAL PHOTOGRAPH RESEARCH SUMMARY

<u>YEAR</u>	<u>ANALYSIS</u>
1937	The Site appeared to be bare land, with bare land on all sides. Hwy 10 and Hwy 93 were visible, west and north of the Site. The railroad tracks appeared to be present.
1994	The Site and adjacent properties appeared to be vacant.
Circa 2008	The Site and adjacent properties appeared as they do today. Highway 10 West and the railroad tracks were visible. The two small structures on the Site were visible, as was the recycling operation on the adjacent property to the east. There appeared to be no evidence of past or present releases of hazardous substances and/or petroleum products on the Site.

4.5 Historical Maps

Sanborn Fire Insurance Maps, on file at the Missoula County Library, were reviewed for information pertaining to the historical uses of the Site and the possible presence of USTs, ASTs or other indicators of the storage of hazardous substances and/or petroleum products at the Site and properties adjacent to the Site.

The Site was not within Sanborn map boundaries.

4.6 Ownership/Occupancy Information

Recent ownership information was obtained from the Montana Department of Revenue property tax records.

Ownership	Year (s)
DeSmet School District #20	1999-Present
US Dept. of Education	Unknown-1999

Occupancy information for the Site was obtained during a review of the Polk City Directories at the Missoula City-County Library.

The subject property did not appear to have a common address at least as far back as 1940. Therefore, the Polk Directories did not contain any obvious occupancy records for the subject Site.

4.7 Permit Review

According to records at the Missoula City Engineering office, the Site is not connected to municipal sewer (City of Missoula, 2008). There was no record of a septic permit for the Site at the MCCHD.

4.8 Zoning

The Site is currently unzoned (City of Missoula, 2008).

4.9 Contact with Current On-Site Owner/Tenant

- **Mary Rasmussen, Clerk, DeSmet School**

Ms. Rasmussen completed the User Questionnaire on behalf of DeSmet School District #20 (Appendix B). Ms. Rasmussen was also interviewed in November 2008 and asked whether she knew of any environmental issues at the subject Site. She said that she had no knowledge of any spills or releases of hazardous substances and/or petroleum products at the Site. Ms. Rasmussen used to live near the Site, and she said that the Site has been vacant at least as far back as 1955. She said the buildings at the Site were used by National Oceanic A

4.10 Other Interviews

- **John Harvala, Missoula City-County Health Department**

Mr. Harvala was interviewed in November 2008 and asked whether he knew of any environmental issues at the subject Site. He said that he had no knowledge of any spills or releases of hazardous substances and/or petroleum products at the Site.

4.11 Analysis of Impact on Recognized Environmental Conditions

This portion of the ESA produced no evidence suggesting that recognized environmental conditions affect the Site.

5.0 INFORMATION DERIVED FROM SITE RECONNAISSANCE AND INTERVIEWS

5.1 Hazardous Substances in Connection with Identified Uses

Hazardous substances and/or petroleum products, as defined in Section 1.6, were not observed during the Site reconnaissance on November 24, 2008.

5.2 Unidentified Substance Containers

Unidentified substance containers were observed during the site reconnaissance on November 24, 2008. However, all containers were empty and there was no evidence that hazardous substances or petroleum products were stored or released from these containers.

5.3 Storage Tanks

No above ground storage tanks or any indicators of underground storage tanks were observed during the site reconnaissance on November 24, 2008.

5.4 Indications of Polychlorinated Biphenyls (PCBs)

Indications of PCBs on or near the subject Site were not observed during the site reconnaissance on November 24, 2008.

5.5 Indications of Asbestos Containing Materials (ACMs)

Potential ACMs were not observed during the site reconnaissance on November 24, 2008.

5.6 Indications of Solid Waste Disposal

There were no indications of solid waste disposal observed during the site reconnaissance on November 24, 2008.

5.7 Physical Setting Analysis

The hydrogeologic characteristics reported for the Site and vicinity suggests that the approximate depth to groundwater beneath the Site is between 80 and 100 feet below ground surface (MCCHD, 1989). Groundwater is believed to generally flow southwest (MCCHD 1989). Groundwater at the Site and in the immediately surrounding area does not appear to be significantly impacted by hazardous substances or petroleum products based on a review of MCCHD and MDEQ files.

5.8 Other Conditions of Concern

During the site reconnaissance on November 24, 2008, the Higgins Consulting Inspector did not observe any of the following indicators of potential hazardous substance releases:

- stressed vegetation
- stained pavement
- pits, ponds, or lagoons
- generation of wastewater and potential releases
- stained soils
- storm drains
- floor drains

5.9 Analysis of Impact on Recognized Environmental Conditions

This portion of the ESA produced no evidence suggesting that recognized environmental conditions affect the Site.

6.0 FINDINGS AND CONCLUSIONS

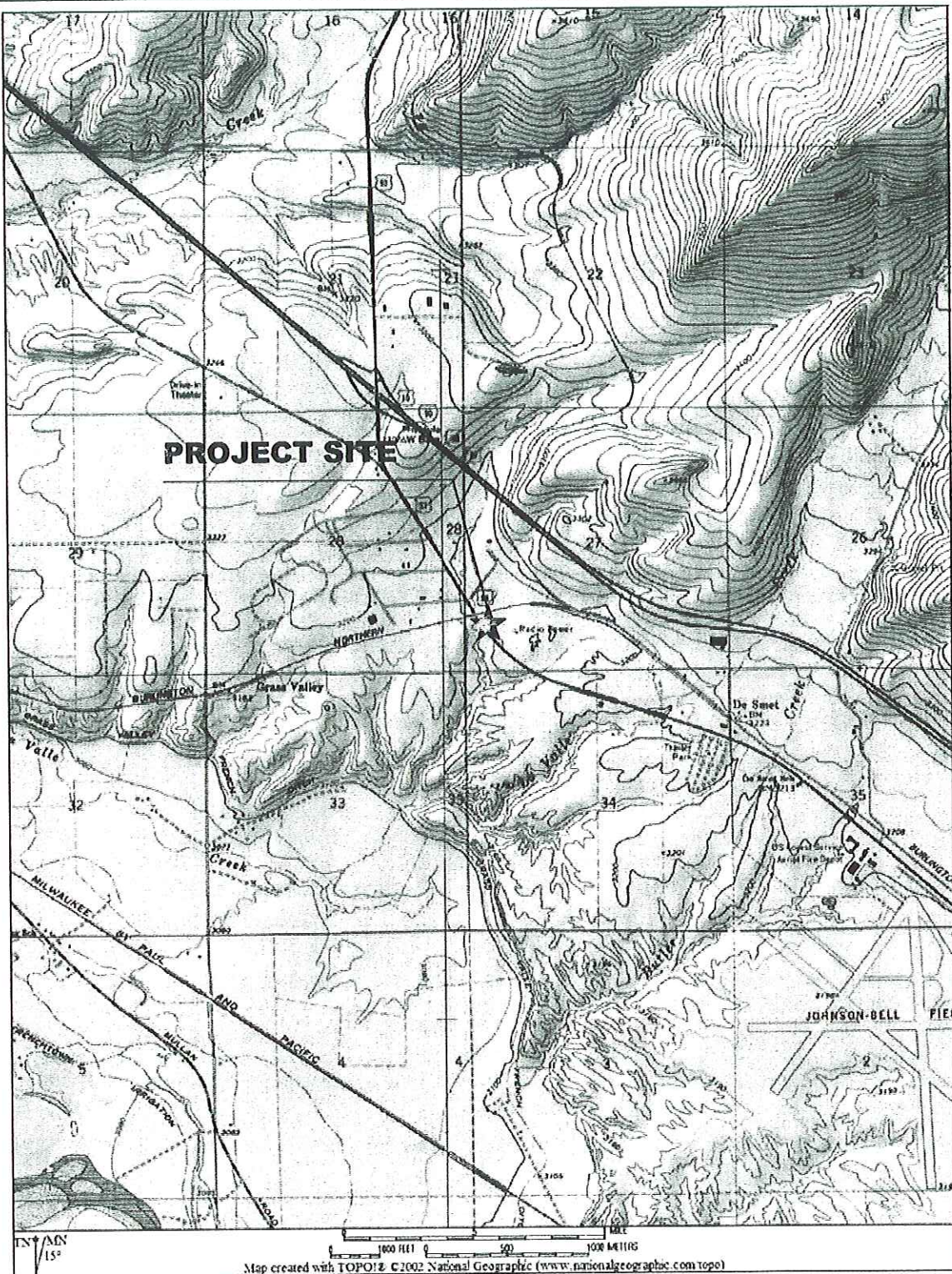
Higgins Consulting Engineers performed a Phase I Environmental Site Assessment (ESA) of the Site located in the Southwest ¼ of Section 27, Township 14 North, Range 20 West in Missoula County, Montana. Higgins Consulting Engineers endeavored to perform this Phase I ESA in conformance with the scope and limitations of ASTM Standard E-1527 with exceptions to and deletions from the above-referenced standard described in the Limitations and Exceptions of Assessment (See Section 1.3) of this report.

In conclusion, Higgins Consulting Engineers believes the following:

This ESA produced no evidence suggesting that recognized environmental conditions affect the Site.

7.0 REFERENCES

- American Society For Testing And Materials, 2000. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. ASTM Standard E 1527-05.
- Geldon, 1980. *Hydrogeology and Water Resources of the Missoula Basin, Montana*. University of Montana. 1980.
- Missoula City-County Health Department, 1989. *Sole Source Aquifer Petition for the Missoula Valley Aquifer*. Environmental Health Division of the Missoula City County Health Department. 1989.
- City of Missoula, 2008. ftp://www.co.missoula.mt.us/opgftp/Maps/Zoning_Maps
- City of Missoula, 2008. <http://www.ci.missoula.mt.us/publicworks/default.htm>
- MDEQ, 2008. http://deq.mt.gov/rem/PDFs/Superfund_Booklet.pdf
- Personal Correspondence, November 2008. Personal Communication with Mr. John Harvala, Missoula City-County Health Department.
- Personal Correspondence, November 2008. Personal Communication with Ms. Mary Rasmussen, Clerk, DeSmet School District #20.
- Woessner, William W., 1988. *Missoula Valley Aquifer Study: Hydrogeology of the Eastern Portion of the Missoula Aquifer, Missoula County, Montana, Volume 1*. Prepared for Water Development Bureau, Montana Department of Natural Resources and Conservation, Helena, Montana. Dated December 16, 1988.



DESMET SCHOOL DISTRICT #20

SW1/4, SEC27, T14N, R20W ESA

FIGURE 1

VICINITY MAP

PROJECT: 10164

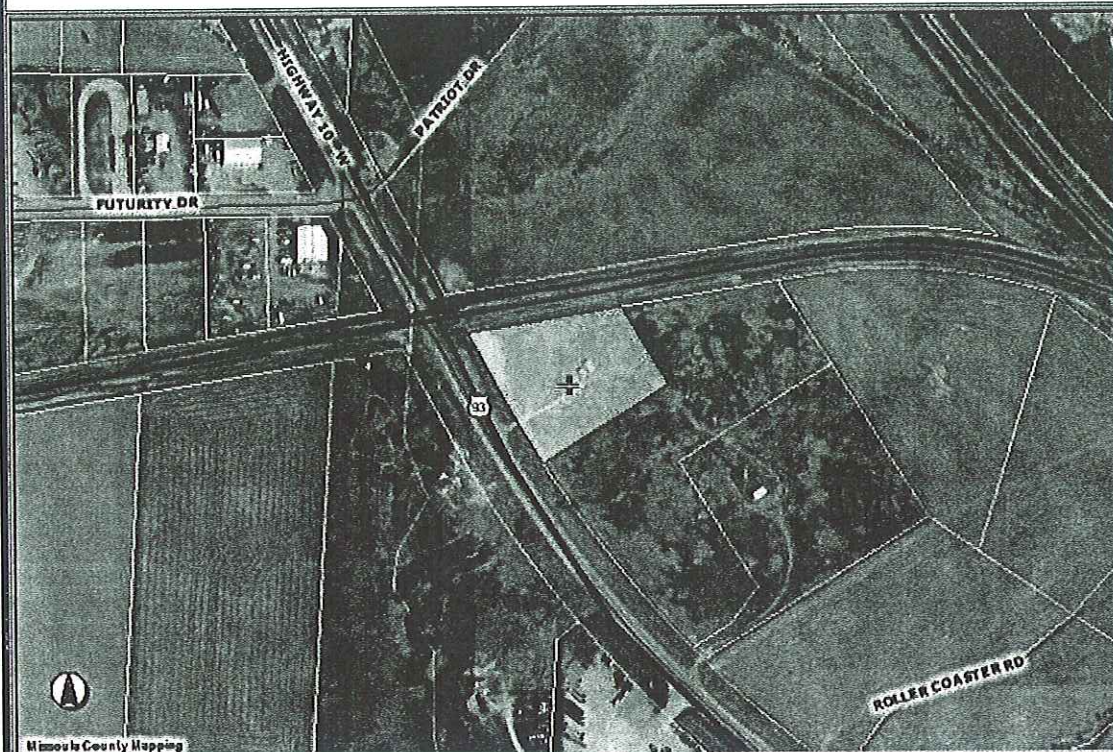
DATE: NOVEMBER 2008

SCALE:

BY: FWHL CHECKED:

HIGGINS CONSULTING ENGINEERS
engineers and scientists

Property Boundary



☐ select layer
Highways

Interstate
 Montana Road
 Secondary
 U.S. Route

Lake Labels
 Roads
 Rivers & Lakes

ISLAND
 LAKE
 RIVER
 Streams
 Ownership
 Parcels

County Boundaries

PLSS Section Lines

1999 Aerial Image
(monochromatic,
0.5 ft
resolution)

Scale 1:SCALE 1:4658

DISCLAIMER: No reliance should be placed on the completeness or the accuracy of this information without first consulting original records and personally verifying the accuracy of any and all information displayed on these pages. The maps are not a survey product. It is a reference publication. It is merely a transcription of public record data and some observed data without modification except for graphical purposes.

Site Design By: GCS Research LLC ©
2003
www.gcs-research.com
Map Created: 12/2/2008 2:54:50 PM

DESMET SCHOOL DISTRICT #20
SW1/4, SEC27, T14N, R20W ESA

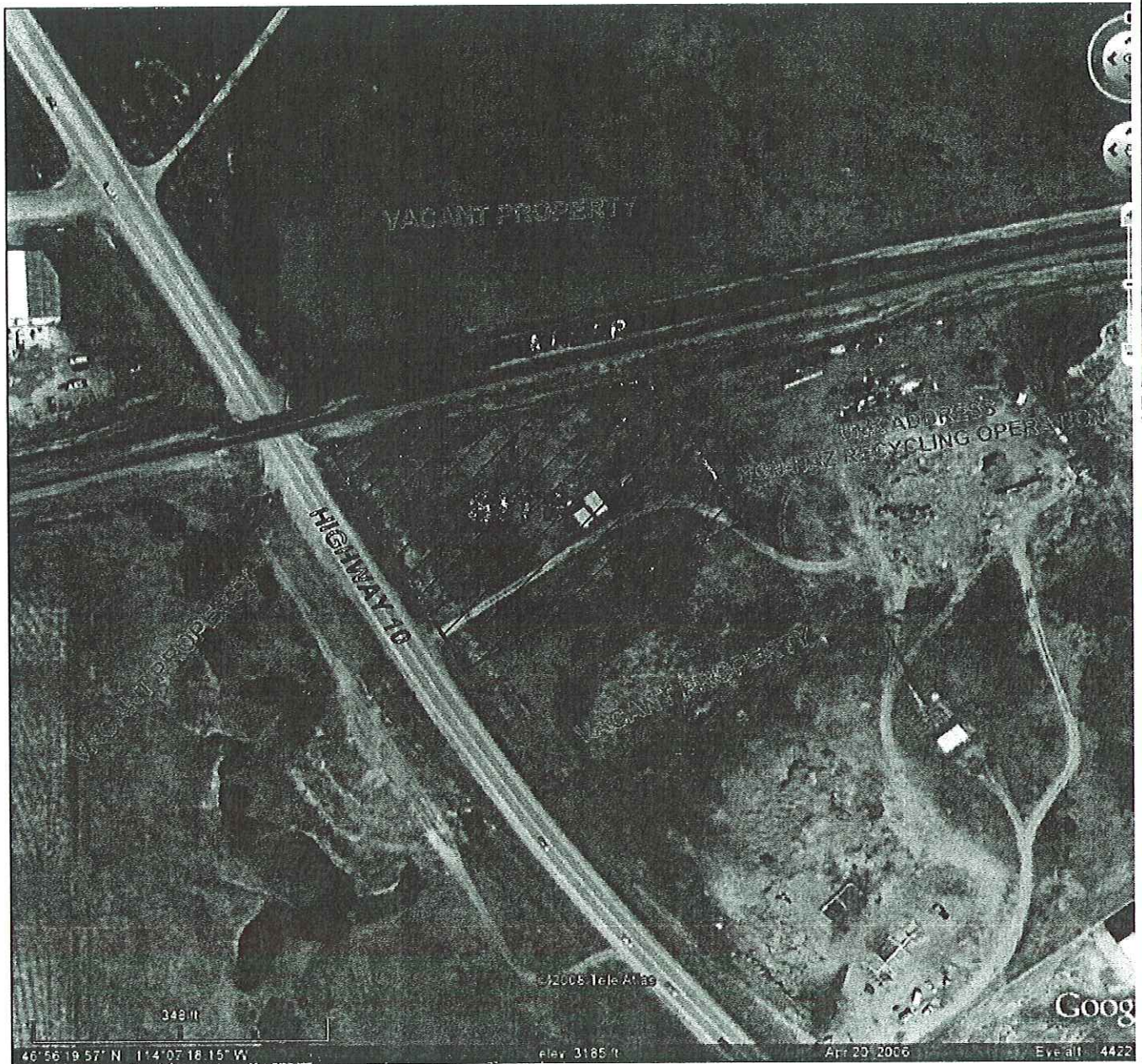
FIGURE 2

PROPERTY BOUNDARY MAP

PROJECT: 10164

DATE: NOVEMBER 2008

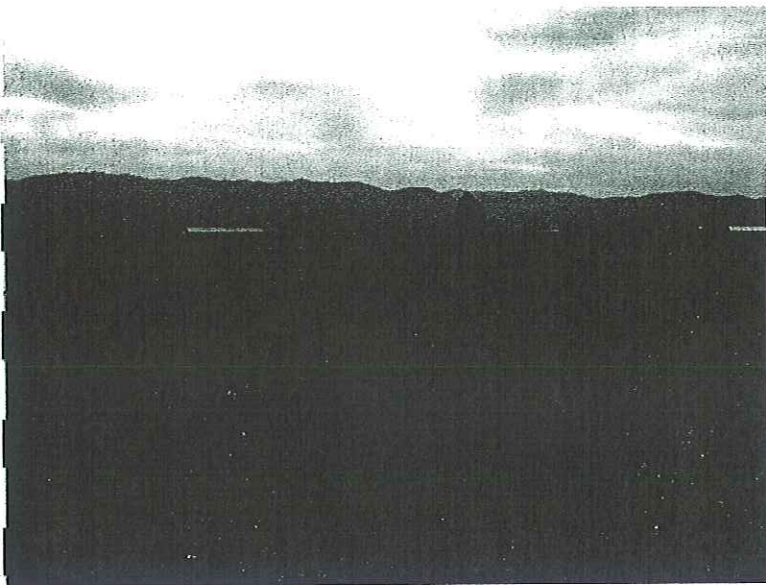
HIGGINS CONSULTING ENGINEERS
engineering and science



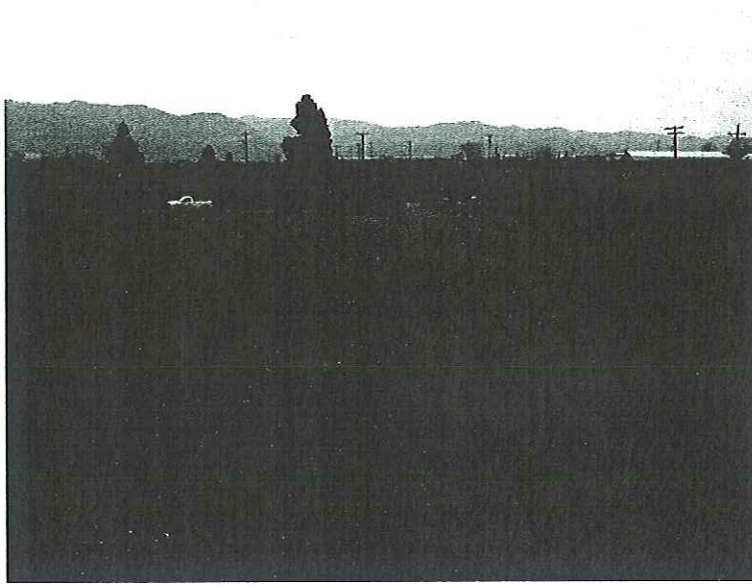
DESMET SCHOOL DISTRICT #20
SW1/4, SEC27, T14N, R20W ESA

FIGURE 3
SITE MAP

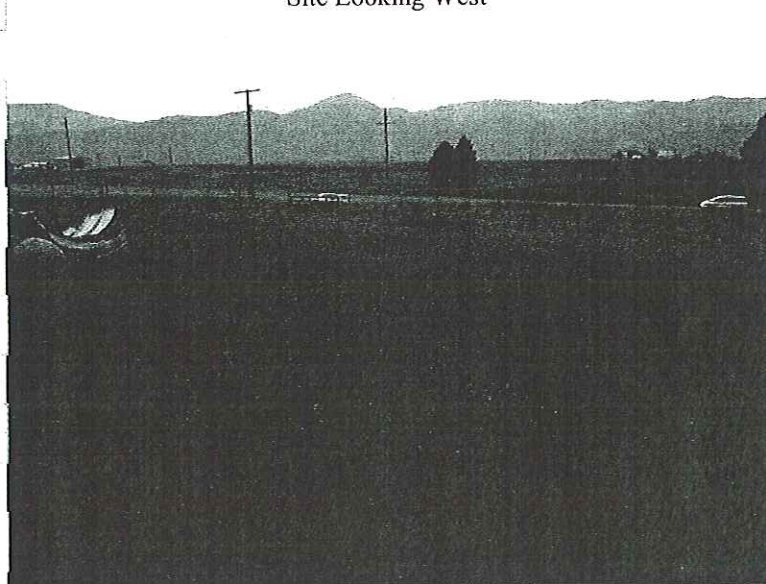
PROJECT: 16164	DATE: NOVEMBER 2008
SCALE: NONE	BY: FWH CHECKED:
HIGGINS CONSULTING ENGINEERS, LLC engineers and scientists	



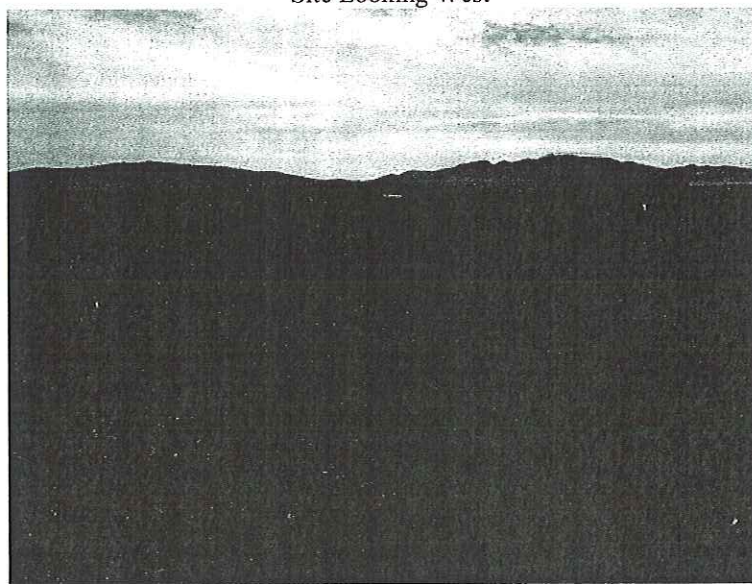
Site Looking West



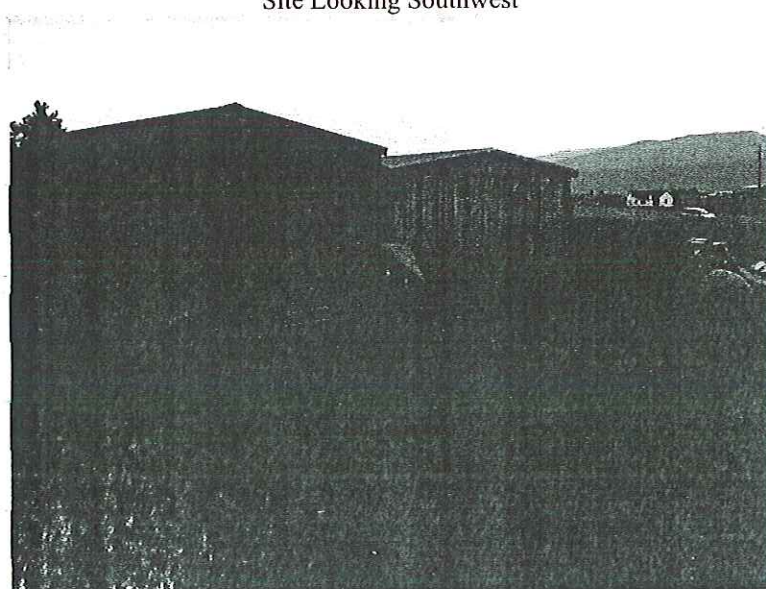
Site Looking West



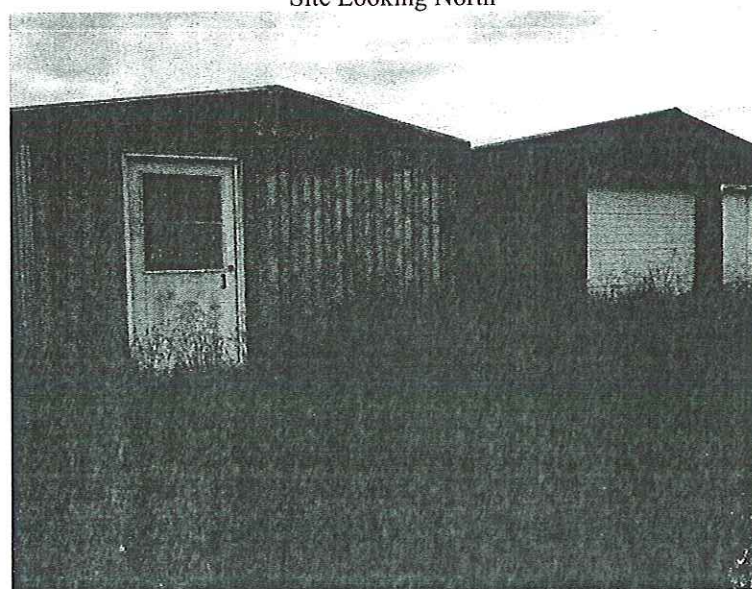
Site Looking Southwest



Site Looking North



Abandoned NOAA Buildings



Abandoned NOAA Buildings

HIGGINS CONSULTING ENGINEERS, LLC

CONSULTING ENGINEERS AND SCIENTISTS

PHASE I ESA USER QUESTIONNAIRE¹

Please answer the following questions to the best of your knowledge.

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
2. Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
3. As the User of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property?
5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? (i.e., knowledge of past uses, chemicals used past or present, spills or other chemical releases, or environmental cleanup conducted on the property)
6. As the User of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

¹ Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process, E-1527-05, X3, User Questionnaire

Skip Higgins
Fax #543-4220

Answers to questionnaire

1. We are not aware of any environmental liens against the property that are filed or recorded under federal, state or tribal laws.
2. We are not aware AULS, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law.
3. We do not have any specialized knowledge or experience related to the property. We are not involved in the same line of business as the former occupants of the property or the adjoining property.
4. Yes
5. We are not aware of or have any information regarding past usage, chemical spills or cleanups on the property.
6. No. there are no obvious indicators that this property would become contaminated or have any presence of contamination.

Mary J. Rasmussen

APPENDIX C

SCOPE OF SERVICE

The scope of service is consistent with that outlined in ASTM Standard E 1527. The specific services provided are outlined below.

- Performed an on-site reconnaissance to identify indicators (as defined in later sections) of the existence of recognized environmental conditions.
- While being located in public thoroughfares, looked at adjacent properties or properties in the vicinity in an attempt to see if any occupied facilities or structures are operated by entities that are likely to use, store, generate, or dispose of hazardous substances.
- Reviewed the following Federal and State environmental databases:
 - NPL; October 2008; <http://www.epa.gov/superfund/sites/npl/mt.htm>
 - Proposed NPL, October 2008; <http://www.epa.gov/superfund/sites/npl/mt.htm>
 - CERCLIS, October 2008; <http://www.epa.gov/superfund/sites/npl/mt.htm>
 - CERCLIS-NFRAP, October 2008; <http://www.epa.gov/superfund/sites/npl/mt.htm>
 - RCRAInfo, October 2008; http://iaspub.epa.gov/enviro/fii_master.fii_retrieve?; Search: Missoula County, Missoula City
 - STATE SUPERFUND; <http://www.deq.mt.gov/Brownfields/PDFs/ResponseActionList.pdf>
 - VCRA REGISTRY; July 2008; <http://www.deq.mt.gov/statesuperfund/SrsReports/REGISTRY.pdf>
 - VOLUNTARY CLEANUP & REDEVELOPMENT ACT; <http://www.deq.mt.gov/Brownfields/PDFs/ResponseActionList.pdf>
 - HAZARDOUS WASTE SITES; <http://www.deq.mt.gov/Brownfields/PDFs/ResponseActionList.pdf>
 - Brownfields, <http://www.deq.mt.gov/Brownfields/PDFs/ResponseActionList.pdf>
 - MONTANA NRIS; <http://nris.mt.gov/deq/remsitequery>
 - LUST List, November 2008; <http://www.deq.mt.gov/UST/MonthlyReportsPDF/LUSTList.pdf>
 - UST List, November 2008; <http://www.deq.mt.gov/UST/MonthlyReportsPDF/USTList.pdf>
 - CDL List, November 2008; <http://svc.mt.gov/deq/methquery/>
 - Solid Waste Landfill List, October 2003
- Reviewed the following sources to obtain information about the potential for hazardous substances to exist at the site or at properties located in the vicinity (unless noted otherwise) of the site:
 - Montana Department of Environmental Quality Petroleum Release Section Files
 - Montana Department of Environmental Quality CECRA Program Files
 - Missoula City-County Health Department Files
- Reviewed the following aerial photographs available from the Missoula County Surveyor's Office to obtain information concerning the history of the site and surrounding areas:
 - 1937; File 8B
 - 1994; BB-B 287
 - 2008; Google Earth
- Reviewed the following references for information pertaining to the documented occurrence and quality of groundwater in the vicinity of the site:
 - See Section 7.0
 - City of Missoula

- Reviewed the following maps to obtain information about the site's topography and previous development and uses of the site and properties adjacent to and in the vicinity of the site:
 - ⇒ 1964 USGS Northwest Missoula Montana Quadrangle
 - ⇒ 1929 Sanborn Fire Insurance Map
 - ⇒ 1938 Sanborn Fire Insurance Map
- Interviewed the following individuals:
 - ⇒ Ms. Mary Rasmussen, Clerk, DeSmet School District #20, November, 2008
 - ⇒ Mr. John Harvala, November 2008
- Ownership Records filed with the Montana Department of Revenue Assessor's Office were reviewed.
- Occupancy records were reviewed at the Missoula Public Library.